

***Stenoptilia mariae-luisae* Bigot & Picard, 2002 and *Crombrugghia reichli* Arenberger, 1998 in Turkey (Lepidoptera: Pterophoridae)**

Imre Fazekas

Abstract – The author announces the presence of *Stenoptilia mariae-luisae* Bigot & Picard, 2002 and *Crombrugghia reichli* Arenberger, 1998 in Turkey, the first records of the taxa in Asia Minor. The male genitalia and distribution maps are illustrated with line drawings. With 5 figures.

Key words – Lepidoptera, Pterophoridae *Stenoptilia mariae-luisae*, *Crombrugghia reichli*, new records, Turkey.

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Introduction

Stenoptilia mariae-luisae species described from France (Bigot & Picard, 2002). Since then, it has been found in other Mediterranean countries. The taxonomic position of this species is unclear. Coloration and shape of markings resemble those of *S. jacutica* Ustjuzhanin, 1996 and female genitalia as similar to those of *S. inopiniana*. Bigot & Picard, 2002. According to Gielis (2003), *S. mariae-luisae* is closely related to *S. aridus* (Zeller, 1847) and he has suggested that they may be synonymous. Arenberger (2005) states that it is probably a distinct species, but insufficiently known, showing however, only slight differences in wings and genitalia.

The occurrence of *Crombrugghia reichli* Arenberger, 1998 in Asia Minor is not surprising. The only record for Cyprus was a misidentification (Arenberger 1998, 2002). The species occurs in very isolated populations in mountains at altitudes of 1000–1500 m. It is probably a distinct species, but insufficiently known, but with only slight differences in facies and male genitalia. The genital characters of female require examination of additional material.

***Stenoptilia mariae-luisae* Bigot & Picard, 2002**

Alexanor 21 (5): 305. Fig. 1, 2. Locus typicus: France, Alpes de Haute-Provence.

Synonym: *Stenoptilia linariae* Bigot & Picard, 1993

References: Arenberger 2005, Gielis 2003.

Diagnosis: Wingspan 18–19 mm. Forewing plain yellowish-brown, a with large discal spot. Head, thorax and abdomen of similar colour, but somewhat clearer.

Similar species: *Stenoptilia jacutica* Ustjuzhanin, 1996; *Stenoptilia inopiniana*. Bigot & Picard, 2002; *Stenoptilia arida* (Zeller, 1847). Taxonomy, distribution and biology discussed in Arenberger (2005).

Genitalia: In male genitalia, the uncus is small and reaches margin of tegumen. Tegumen margin broad and concave. Apex of the anellus wavy with small spur. Female genitalia

illustrated by Arenberger (2005: Taf. 19, Fig. 18). This author considers that the genital characters of both sexes require further examination.

Biology: The moth flies from August to October. From 300 m (in France) above sea-level up to 1850 m in Turkey. The hostplant is *Kickxia spuria* (L.) Dumort [Scrophulariaceae], a submediterranean flora element. Typically in agricultural habitats, in arable land where there is low-intensity agriculture and in rich fens, eu- and mesotrophic meadows and tall herb communities.

Distribution: Known from Algeria, Tunisia, Spain, France, Italy, Crete (Arenberger 2005) and now new record from Turkey. Holomediterranean faunal element, the populations very isolated.

New data of distribution: 1 male, Turkey, “Erzurum; Atatürk Ü. Campus; 24.X.2007, 1850 m, leg. H. Özbek, ID-Nr. MK 11806”; “präp. M. Kurz”; in coll. Regiograf Institute, H-Komló.

Remarks: Speciation processes in Mediterranean region can often be explained by isolation of populations within separate glacial refuges followed by inter- and postglacial expansion to the present distribution area. Regarding the *Stenoptilia grisea* species group, speciation of these comparatively young semispecies evidently happened in the postglacial period.

The author is therefore of the opinion that the genitalia features given by Bigot and Picard are insufficient for an incontestable identification. On the contrary, it also increases the already known polytypical picture of the species *Stenoptilia arida* (according to Gielis 2003 = *aridus* (sic!)). In addition to the problems that have arisen over identification, there have also been contradictions in descriptions of larval conditions and foodplants of this species.



Fig. 1. Male genitalia of *Stenoptilia mariaeluisae*: Turkey, Erzurum, Atatürk U Campus, 24.X.2007, 1850 m. leg H. Özbek. ID-Nr. MK. 11806, präp. am 22.5.2008. M. Kurz. Drawing by I. Fazekas.

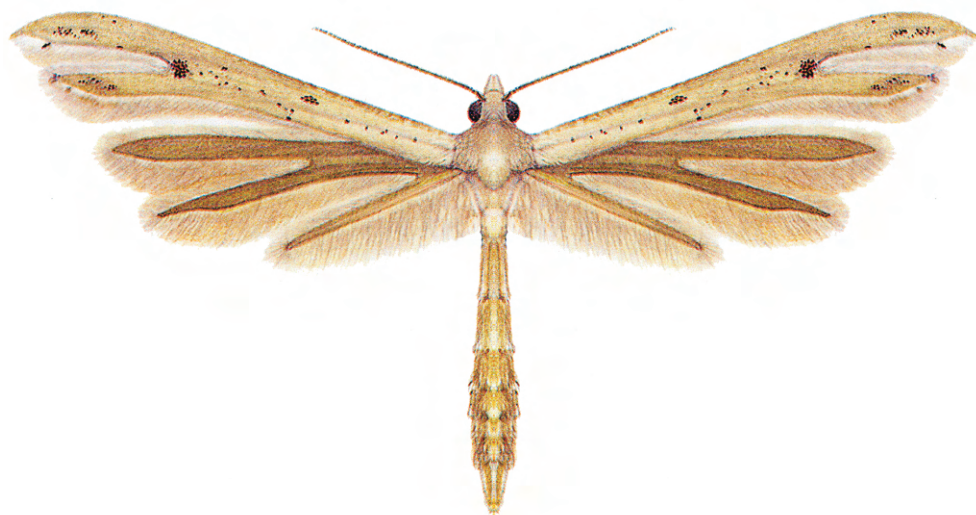


Fig. 2. Adult of *Stenoptilia mariae-luisae*. The image according to Arenberger 2005; modification by I. Fazekas.

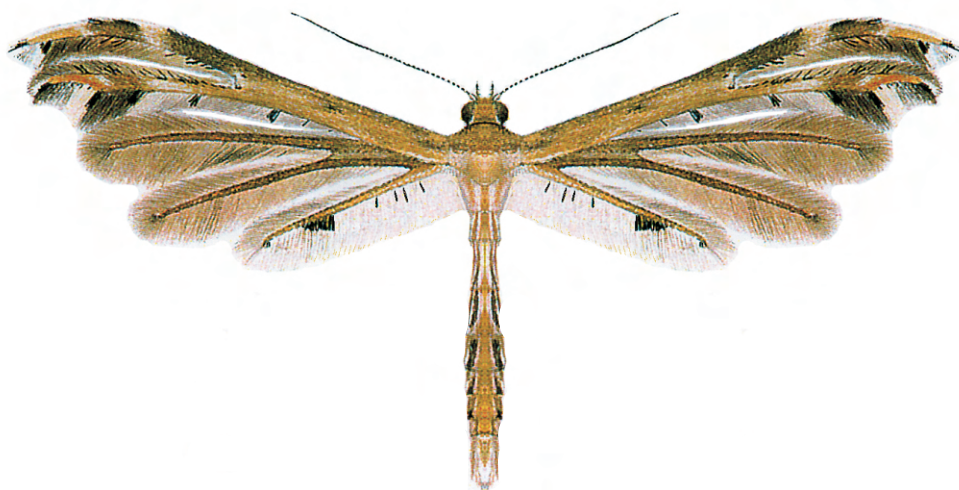


Fig. 3. Adult of *Crombrugghia reichli*. The image according to Arenberger 2002; modification by I. Fazekas.

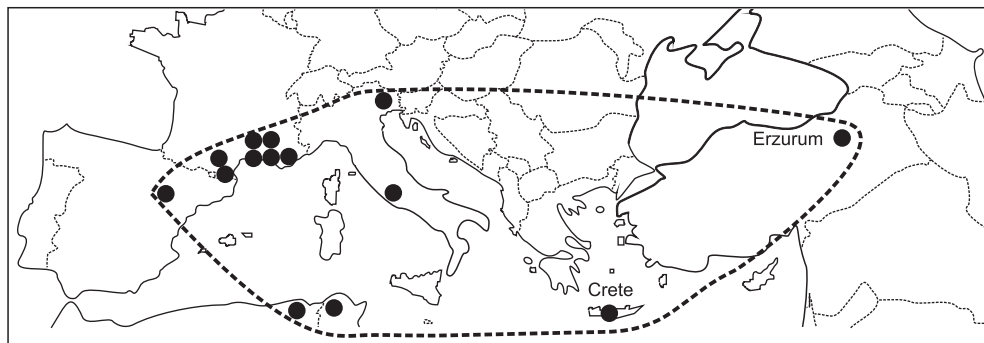


Fig. 4. Sketch-map of distribution of *Stenoptilia mariae-luisae* Bigot & Picard, 2002.

Crombrugghia reichli Arenberger, 1998

Stapfia 55: 306–307., Fig. 5–6. Locus typicus: Cyprus, Troodos Mountains, 1500 m.

References: Arenberger 1998, 2002, Fazekas 2003, Gielis 2003.

Diagnosis: Wingspan 19–24 mm. In general, a larger species than *C. distans*. Forewing colour auburn, with middle of costa auburn or greyish-brown, and base of the forewing yellowish-brown; the second whitish transverse marking is broad. The scale-tooth on the third lobe of the hindwing as in *C. distans*.

Similar species: Can be confused with certain forms of *C. distans*. Taxonomy, distribution and biology discussed in Arenberger (2002).

Genitalia: In male genitalia, the valvular lobe is laterally curved, tegumen lobe extended. The apex of the uncus narrower than in *C. distans*. The lateral face of the uncus sclerotized. The apex of the aedeagus beaked, with one hunch. Female genitalia illustrated by Arenberger (2002: Taf. 26, Fig. 55).

Biology: *C. reichli* is uni- or bivoltine, adult emergence known in May (Turkey) or from July to August (in Cyprus), usually from 1000 m up to 1500 m above sea-level, sometimes down to sea-level. Early stages and host-plant unknown. Habitat is xerothermophilous. Limited information available about habitat preference.

Distribution: Eastern Mediterranean species; Cyprus (Arenberger 2002) and present new localities in Turkey.

New data of distribution: 1 male, Turkey, Prov. Seyhan, Kozan 10km N, 5.V.1989 leg. Szabóky, gen. prep. Fazekas I. No. 3133; in coll. Regiograf Institute, H-Komló.

Remarks: The species described by Arenberger (1998) shows minor differences from *Crombrugghia distans* (Zeller, 1847). According to Arenberger (2002), *C. reichli* is endemic species in Cyprus, but it is almost certainly more widespread. *Crombrugghia* Tutt, 1907 has yet to be included in the revision of the fauna of Asia Minor. The data in many species lists is vague, because the majority of authors do not examine the genitalia.

In “Five new species, distribution records of plume moths from Mongolia, Russia, Turkey, Balkan and the Afrika” (Fazekas 2003), I reported specimens from Turkey as *C. distans*. (see in p. 20; Prov. Seyhan, Kozan, gen. prep. Fazekas No. 3133), here reidentified as *C. reichli*.

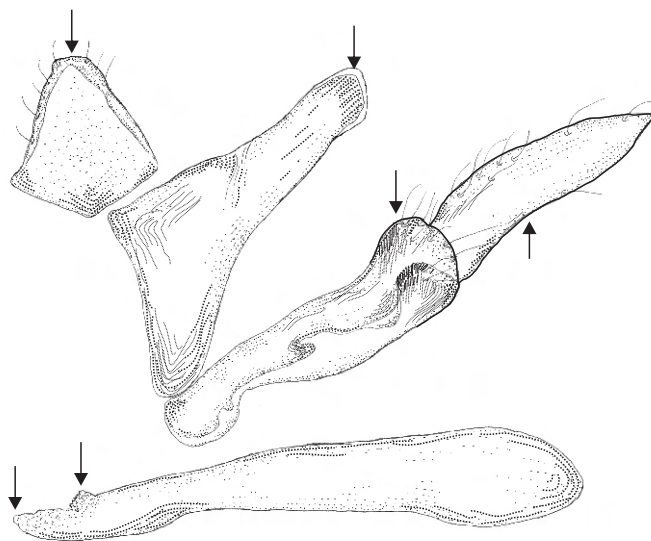


Fig. 5. Male genitalia of *Crombrugghia reichli* Arenberger, 1998; Turkey, Prov. Seyhan, Kozan 10 km, gen. prep. Fazekas I. No. 3133.

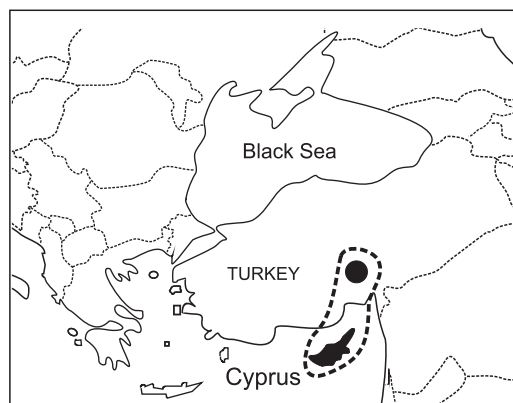


Fig. 6. Sketch-map of distribution of *Crombrugghia reichli* Arenberger, 1998.

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